

SILICA-FILLED ELASTOMERIC COMPOUNDS
ABSTRACT OF THE DISCLOSURE

The invention provides a process for preparing a filled halobutyl elastomer, which includes mixing a halobutyl elastomer with at least one mineral filler that has been reacted with at least one organic compound containing at least one basic nitrogen-containing group and at least one hydroxyl group and, optionally, with at least one silazane compound before admixing the filler with the halobutyl elastomer and optionally curing the filled elastomer with sulfur or other curative systems. This invention has the advantages of (a) not evolving alcohol either during the manufacture or subsequent use of the article manufactured from the compound, (b) improving the scorch safety of filled halobutyl elastomer compounds which employ silica as the mineral filler and a hydroxyl- and amine-containing additive as a dispersing aid and (c) significantly reducing the cost of the compound compared to analogous compounds currently known in the art.